David R. Shaub (Cal. SBN 032322) (admitted *pro hac vice*)
Lisbeth Bosshart (Cal. SBN 201822) (admitted *pro hac vice*)
Stephen D. Morgan (Cal. SBN 239345) (admitted *pro hac vice*)
SHAUB & WILLIAMS LLP
12121 Wilshire Boulevard, Suite 205
Los Angeles, CA 90025-1165
(310) 826-6678; (310) 826-8042 (fax)
lawfirm@sw-law.com

David Rosenbaum (Il. SBN 6188852) (admitted *pro hac vice*)
ROSENBAUM & SILVERT, P.C.
1480 Techny Road
Northbrook, IL 60062
(847) 770-6000; (847) 770-6006 (fax)
drosenbaum@biopatentlaw.com

Jay A. Bondell (S.D.N.Y. Bar No. JB8521)
LADAS & PARRY LLP
26 West 61st Street
New York, NY 10023
(212) 708-1800; (212) 246-8959 (fax)
jbondell@ladas.com

Attorneys for Plaintiff Augme Technologies, Inc.

UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK

AUGME TECHNOLOGIES, INC., a Delaware corporation, Plaintiff, v. TACODA LLC, a Delaware limited liability Company, formerly known as TACODA, INC., a Delaware Corporation; AOL INC., a Delaware Corporation, formerly known as AOL LLC, a Delaware limited liability company. Defendants.	CASE NO. 1:07-cv-07088-CM-GWG [PROPOSED] SECOND AMENDED COMPLAINT: 1. Patent Infringement of U.S. Patent No. 6,594,691; 2. Patent Infringement of U.S. Patent No. 7,269,636; 3. Violation of the New York Uniform Fraudulent Conveyance Act. **[DEMAND FOR JURY TRIAL]**

Plaintiff, Augme Technologies, Inc. ("Plaintiff" or "Augme"), by and through its above-referenced attorneys, hereby complains and alleges as follows:

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD, STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

NATURE OF THE ACTION AND THE PARTIES

1. This is an action against Defendants Tacoda LLC ("Tacoda") and AOL Inc. ("AOL") for patent infringement of Plaintiff Augme's U.S. Patent No. 6,594,691 ("the '691 patent") and U.S. Patent No. 7,269,636 ("the '636 patent"). Attached hereto as Exhibit A is a true and correct copy of the '691 patent, and attached hereto as Exhibit B is a true and correct copy of the '636 patent.

2. Plaintiff Augme is a corporation organized under the laws of Delaware, with its principal place of business in New York, New York. Plaintiff Augme was formerly known as Modavox, Inc., a corporation organized under the laws of Delaware, which had its principal place of business in Phoenix, Arizona.

3. Upon information and belief, Defendant Tacoda LLC is a limited liability company organized under the laws of the state of Delaware, and was formerly Tacoda, Inc., a corporation organized under the laws of the state of Delaware. Upon information and belief, at all times mentioned herein, Defendant Tacoda's principal place of business has been and is located in New York, New York.

4. Upon information and belief, Defendant AOL is a corporation organized under the laws of Delaware. Upon information and belief Defendant AOL was formerly known as AOL LLC, a limited liability company organized under the laws of the state of Delaware. Upon information and belief, at all times mentioned herein, Defendant AOL's principal place of business has been and is located in Dulles, Virginia, and its corporate headquarters have been and are located in New York, New York.

5. Plaintiff is informed and believes, and on that basis alleges, each defendant, was or is the agent, servant, employee, or partner of each of the remaining Defendants, and is and has been acting within the purpose, scope, and course of said agency, service, employment, or partnership, with the express and/or implied knowledge, permission, and consent of the remaining Defendants, and approved the acts of one or more of the other Defendants.

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

6. In and after 2007, AOL has exercised complete domination and control over Tacoda, and the operations of AOL and Tacoda are now so intertwined and their assets so commingled, that, upon information and belief, Tacoda is the *alter ego* of AOL and is liable for all of the conduct alleged herein. In addition, since July 2007, there has been a *de facto* merger of AOL and Tacoda, such that AOL is liable for the actions alleged herein under the theory of successor liability. In greater detail, in July of 2007, AOL and Tacoda entered into a merger agreement whereby a wholly owned subsidiary of AOL would merge into Tacoda, with Tacoda surviving. As a result, Tacoda was then to continue its existence as a wholly owned subsidiary of AOL, continuing its separate operations. After the merger closed in 2007, however, AOL, between then and the present, transferred virtually all of Tacoda's customers, sales, revenues, cash, key personnel and other tangible and intangible assets to AOL and its divisions, and Tacoda has ceased its operations and ordinary business as a separate entity and has been stagnant in its activities. During the above period, Tacoda has not been treated as a separate, wholly owned subsidiary of AOL, has become shorn of its assets and has become, in essence, a shell for AOL. Augme is now informed and believes that AOL has taken over the technology previously utilized by Tacoda and which infringes Augme's patents, and has been employing said technology solely for its own means, even though it had purported to continue Tacoda as a distinct entity. Still further, AOL has exercised complete domination and control over Tacoda with respect to any facet of patent litigation that it is involved with, including this action. A fraud and injustice would be exacted upon Augme if AOL were not held liable for the conduct alleged herein under an *alter ego* theory of liability and a successor liability (*de facto* merger) theory.

JURISDICTION AND VENUE

7. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1338 as well as pendent jurisdiction over any state law claims asserted herein pursuant to 28 U.S.C. § 1367(a). Further, this is an action for patent infringement arising under the Patent Laws of the

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

United States, Title 35, United States Code. The Court has subject-matter jurisdiction over this action under 28 U.S.C. §1331 and 1338.

8. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1400(b) because Defendants Tacoda and AOL (collectively "Defendants") engage in business dealings in this district by providing interactive websites within this district and/or soliciting sales, contributions and memberships in this district, because both the '691 and '636 patents were infringed in this district, and because Defendants Tacoda and AOL have their principal places of business and/or corporate headquarters within this district.

FIRST CAUSE OF ACTION

(Patent Infringement of U.S. Patent 6,594,691)

(Against All Defendants)

9. Plaintiff incorporates and realleges paragraphs 1 through 8 as though fully set forth herein.

10. Plaintiff Augme is the assignee of record and the sole owner of all right, title and interest in the '691 patent.

11. On information and belief, Defendant Tacoda has operated a business for profit that uses Plaintiff's technology claimed and described in the '691 patent. Defendant Tacoda has neither sought nor received authorization to use Plaintiff's patented technology.

12. To the best of Plaintiff's information and belief, Defendant Tacoda makes, uses, sells, offers for sale and/or induces others to use in this judicial district, and elsewhere throughout the United States, products and services which infringe upon and embody the patented inventions of the '691 patent in violation of 35 U.S.C. §271(a). There exists evidentiary support for such belief and Plaintiff is informed and believes it is likely to have additional evidentiary support for its allegations after it has a reasonable opportunity for further investigation and discovery.

13. Defendant Tacoda will continue to infringe the '691 patent in violation of 35 U.S.C. §271(a), unless enjoined by this Court.

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

14. Plaintiff is informed and believes, and on that basis alleges, that Defendant Tacoda has been inducing, and/or contributing to the infringement of the '691 patent and will continue to induce and/or contribute to the infringement of the '691 patent, in violation of 35 U.S.C. sections 271 (b) and (c), unless enjoined by this Court.

15. As a direct and proximate consequence of Defendant Tacoda's acts of infringement, Plaintiff has been irreparably injured. Unless such acts and practices are preliminarily and permanently enjoined by this Court, Plaintiff will continue to suffer additional and irreparable injury.

16. Plaintiff is entitled to injunctive relief pursuant to 35 U.S.C. §283.

17. As a direct and proximate consequence of Defendant Tacoda's acts of infringement, Plaintiff has suffered, and continues to suffer, damages, in an amount not yet determined, of at least a reasonable royalty due to the infringing acts by Defendant Tacoda, and lost profits due to loss of sales, profits, and potential sales that Plaintiff would have made but for the infringing acts and practices of Defendant Tacoda for which Plaintiff is entitled to relief pursuant to 35 U.S.C. §284.

18. Defendant Tacoda's infringement of the '691 patent has been and continues to be willful and deliberate, in disregard of Plaintiff's rights in the '691 patent.

19. Tacoda is in fact, the *alter ego* of Defendant AOL, such that AOL is liable for the conduct alleged herein.

20. There has been a *de facto* merger of AOL and Tacoda, such that AOL is liable for the actions alleged herein under the theory of successor liability.

SECOND CAUSE OF ACTION

(Patent Infringement of U.S. Patent 7,269,636)

(Against All Defendants)

21. Plaintiff incorporates and realleges paragraphs 1 through 20 as though fully set forth herein.

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

22. Plaintiff Augme is the assignee of record and the sole owner of all right, title and interest in the '636 patent.

23. On information and belief, Defendant Tacoda has operated a business for profit that uses Plaintiff's technology claimed and described in the '636 patent. Defendant Tacoda has neither sought nor received authorization to use Plaintiff's patented technology.

24. To the best of Plaintiff's information and belief, Defendant Tacoda makes, uses, sells, offers for sale and/or induces others to use in this judicial district, and elsewhere throughout the United States, products and services which infringe upon and embody the patented inventions of the '636 patent in violation of 35 U.S.C. §271(a). There exists evidentiary support for such belief and Plaintiff is informed and believes it is likely to have additional evidentiary support for its allegations after it has a reasonable opportunity for further investigation and discovery.

25. Defendant Tacoda will continue to infringe the '636 patent in violation of 35 U.S.C. §271(a), unless enjoined by this Court.

26. Plaintiff is informed and believes, and on that basis alleges, that Defendant Tacoda has been inducing, and/or contributing to the infringement of the '636 patent and will continue to induce and/or contribute to the infringement of the '636 patent, in violation of 35 U.S.C. sections 271 (b) and (c), unless enjoined by this Court.

27. As a direct and proximate consequence of Defendant Tacoda's acts of infringement, Plaintiff has been irreparably injured. Unless such acts and practices are preliminarily and permanently enjoined by this Court, Plaintiff will continue to suffer additional and irreparable injury.

28. Plaintiff is entitled to injunctive relief pursuant to 35 U.S.C. §283.

29. As a direct and proximate consequence of Defendant Tacoda's acts of infringement, Plaintiff has suffered, and continues to suffer, damages, in an amount not yet determined, of at least a reasonable royalty due to the infringing acts by Defendant Tacoda, and lost profits due to loss of sales, profits, and potential sales that Plaintiff would have made but for

the infringing acts and practices of Defendant Tacoda for which Plaintiff is entitled to relief pursuant to 35 U.S.C. §284.

30. Defendant Tacoda's infringement of the '636 patent has been and continues to be willful and deliberate, in disregard of Plaintiff's right in the '636 patent.

31. Tacoda is in fact, the *alter ego* of Defendant AOL, such that AOL is liable for the conduct alleged herein.

32. There has been a *de facto* merger of AOL and Tacoda, such that AOL is liable for the actions alleged herein under the theory of successor liability.

THIRD CAUSE OF ACTION

(Violation of the New York Uniform Fraudulent Conveyance Act)

(Against All Defendants)

33. Plaintiff incorporates and realleges paragraphs 1 through 32 as though fully set forth herein.

34. Plaintiff Augme is a potential creditor of Defendant Tacoda, based on this action, and has been at least since this action was filed on August 9, 2007.

35. Due to the filing of this action, Defendants have been aware that Plaintiff Augme is a potential creditor of Tacoda.

36. Upon information and belief, Defendants' transfer of Tacoda's assets to AOL, as described in detail above, was made without fair consideration to Tacoda, as Tacoda received little if any benefit or value from the transfer.

37. Upon information and belief, as a result of the transfer, Tacoda was rendered insolvent, with insufficient assets to sustain its business and without sufficient assets to ensure that creditors, including Plaintiff, were left with potential adequate relief.

38. Upon information and belief, Defendants transferred Tacoda's assets to AOL with actual intent to hinder, delay and defraud creditors and future creditors, including Plaintiff Augme.

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

39. In taking the actions described herein, Defendants violated, and continue to violate, the New York Uniform Fraudulent Conveyance Act.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for judgment as follows:

ON THE FIRST AND SECOND CAUSES OF ACTION AGAINST ALL DEFENDANTS

1. That this Court issue a preliminary and permanent injunction pursuant to 35 U.S.C. §283 restraining, prohibiting and enjoining Defendants and their agents, employees and any person in active concert or participation with Defendants or who are acting under their direction, who receive actual notice of the injunction through personal service or otherwise, from making, using selling, offering for sale any products or services that infringe the '691 or '636 patents;

2. That this Court issue a preliminary and permanent injunction pursuant to 35 U.S.C. §283 restraining, prohibiting and enjoining Defendants and their agents, employees and any person in active concert or participation with Defendants or who are acting under their direction, who receive actual notice of the injunction through personal service or otherwise, from inducing or contributing to the infringement of the '691 or '636 patents;

3. That this Court grant judgment in favor of Plaintiff and award damages to Plaintiff adequate to compensate for the infringement by Defendants of the '691 and '636 patents in an amount to be determined at trial, but in no event less than a reasonable royalty;

4. That it be adjudged that Defendants' infringement of the '691 and '636 patents has been willful and that this Court enhance the award of damages for willful infringement, up to three times the amount of damages found, pursuant to 35 U.S.C. §284;

5. That this Court order against Defendants an assessment of interest on the damages so computed, and an assessment of costs, pursuant to 35 U.S.C. §284;

6. That this Court issue a declaration that this case is exceptional pursuant to 35 U.S.C. §285 and accordingly, order an award of attorneys' fees and costs in this action;

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD, STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

7. That this Court afford Plaintiff such other and further relief as the Court deems equitable and just.

ON THE THIRD CAUSE OF ACTION AGAINST ALL DEFENDANTS

1. That this Court issue an order disregarding the conveyances of assets from Tacoda to AOL, and attach or levy execution on the property conveyed;

2. That this Court appoint a receiver to take charge of the property and assets conveyed;

3. That this Court issue an order that the transfer of all assets from Tacoda to AOL was made with actual intent to defraud, and accordingly, award attorneys' fees in favor of Plaintiff Augme;

4. That this Court afford Plaintiff such other and further relief as the Court deems equitable and just.

Dated: May 17, 2010

By:

David R. Shaub,
Lisbeth Bosshart,
Stephen D. Morgan,
Attorneys for Plaintiff,
AUGME TECHNOLOGIES, INC.

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

DEMAND FOR JURY TRIAL

Plaintiff AUGME TECHNOLOGIES, INC. hereby renews its demand for a jury trial, as provided by Rule 38(a-b) of the Federal Rules of Civil Procedure.

May 17, 2010

SHAUB & WILLIAMS, LLP

By: _____
David R. Shaub,
Lisbeth Bosshart,
Stephen D. Morgan,
Attorneys for Plaintiff,
AUGME TECHNOLOGIES, INC.

SHAUB & WILLIAMS LLP
12121 WILSHIRE BLVD. STE 205
LOS ANGELES CA, 90025
(310) 826-6678 FAX (310) 826-8042
LAWFIRM@SW-LAW.COM

EXHIBIT A

US006594691B1

(12) **United States Patent**
McCollum et al.

(10) **Patent No.: US 6,594,691 B1**
(45) **Date of Patent: Jul. 15, 2003**

(54) **METHOD AND SYSTEM FOR ADDING FUNCTION TO A WEB PAGE**

(75) Inventors: **Charles P. McCollum**, Phoenix, AZ (US); **Andrew L. Burgess, Jr.**, Desert Hills, AZ (US)

(73) Assignee: **Surfnet Media Group, Inc.**, Tempe, AZ (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/429,357**

(22) Filed: **Oct. 28, 1999**

(51) **Int. Cl.**[7] **G06F 15/16**
(52) **U.S. Cl.** **709/218**; 709/219
(58) **Field of Search** 709/219, 203, 709/224, 225, 227, 281, 310, 217

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,845,075	A	12/1998	Uhler et al.	395/200.3
5,903,727	A	5/1999	Nielsen	395/200.42
6,009,410	A *	12/1999	LeMole et al.	709/219
6,112,240	A *	8/2000	Pogue et al.	709/224
6,128,655	A *	10/2000	Fields et al.	709/225
6,212,564	B1 *	4/2001	Harter et al.	709/227
6,317,761	B1 *	11/2001	Landsman et al.	709/231
6,327,609	B1 *	12/2001	Ludewig et al.	709/203
6,401,134	B1 *	6/2002	Razavi et al.	709/310
6,415,319	B1 *	7/2002	Ambroziak	709/219

OTHER PUBLICATIONS

"Information Bulletin: Internet Cookies" U.S. Department of Energy Computer Incident Advisory Capability, Mar. 12, 1998.*
"RealThings Design Guide" IBM, 1998.*

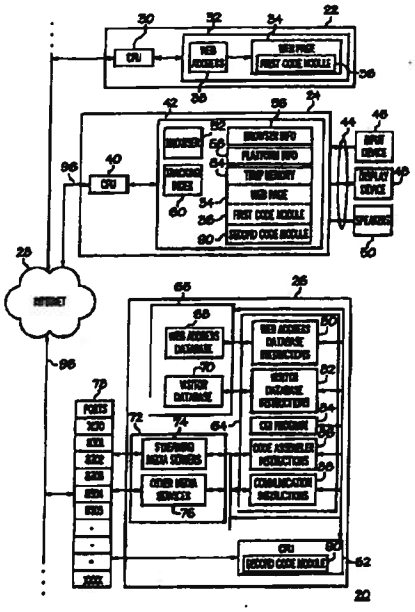
* cited by examiner

Primary Examiner—Zarni Maung
Assistant Examiner—Gregory Clinton
(74) *Attorney, Agent, or Firm*—Jordan M. Meschkow; Lowell W. Gresham; Charlene R. Jacobsen

(57) **ABSTRACT**

A computer network (20) includes a first processor (22) for maintaining a Web page (34) having an embedded first code module (36) and accessible through a Web address (38). A second processor (24) supports a Web browser (52) for downloading the Web page (34) and executing the first code module (36). When executed, the first code module (36) issues a first command (93) to retrieve a second code module (90) from a server system (26). The server system (26) includes a database (68) having a service response (162, 176, 186) associated with the Web address (38). A processor (62) assembles the second code module (90) having the service response (162, 176, 186). When the second code module is retrieved, the first code module (36) issues a second command (106) to initiate execution of the second code module (90) to provide added function to the Web page (34).

28 Claims, 11 Drawing Sheets



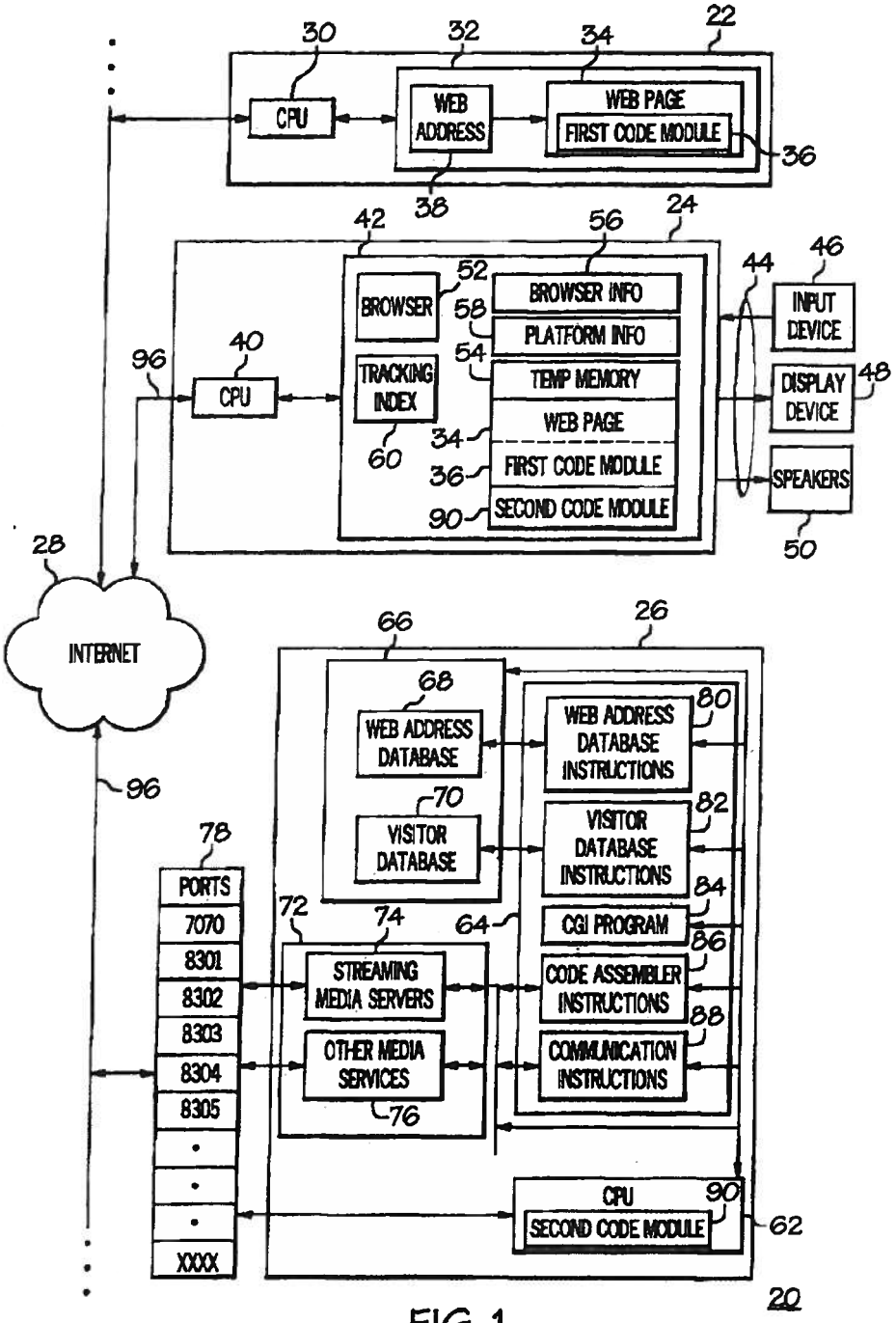

22
30
32
34
CPU
WEB ADDRESS
WEB PAGE
FIRST CODE MODULE
36
38
24
42
56
44
46
52
BROWSER
BROWSER INFO
58
PLATFORM INFO
INPUT DEVICE
40
96
54
TRACKING INDEX
TEMP MEMORY
CPU
DISPLAY DEVICE
48
WEB PAGE
60
34
FIRST CODE MODULE
36
SPEAKERS
90
SECOND CODE MODULE
50
28
INTERNET
66
26
68
80
WEB ADDRESS DATABASE
WEB ADDRESS DATABASE INSTRUCTIONS
70
82
VISITOR DATABASE
VISITOR DATABASE INSTRUCTIONS
78
84
PORTS
7070
8301
8302
8303
8304
8305
72
74
64
CGI PROGRAM
86
STREAMING MEDIA SERVERS
CODE ASSEMBLER INSTRUCTIONS
88
OTHER MEDIA SERVICES
COMMUNICATION INSTRUCTIONS
76
CPU
90
SECOND CODE MODULE
62
XXXX
20

FIG. 1

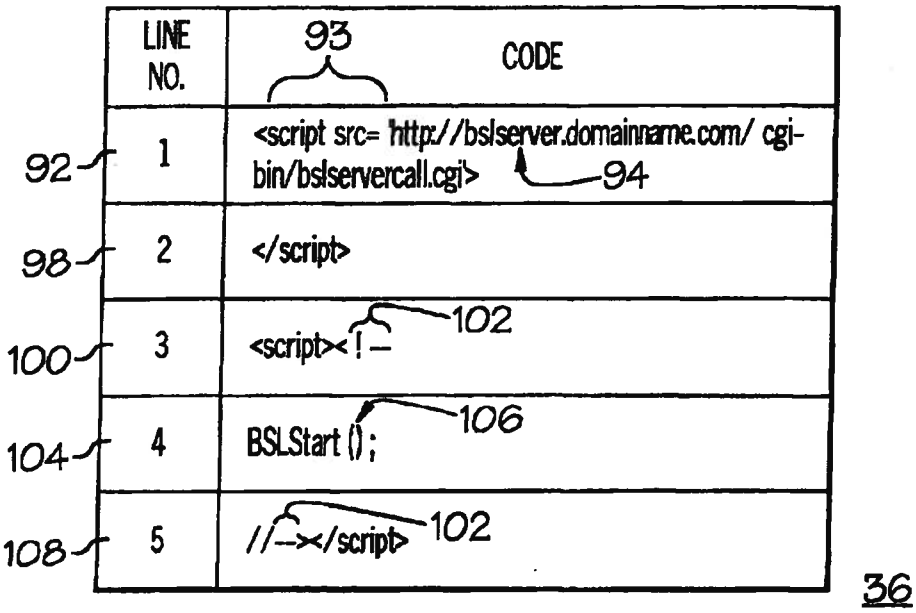

LINE NO.
93
CODE
92
1
<script src= 'http://bslserver.domainname.com/ cgi-bin/bslservercall.cgi>
94
98
2
</script>
100
3
<script><!–
102
104
4
BSLStart ();
106
108
5
//–></script>
102
36

FIG. 2

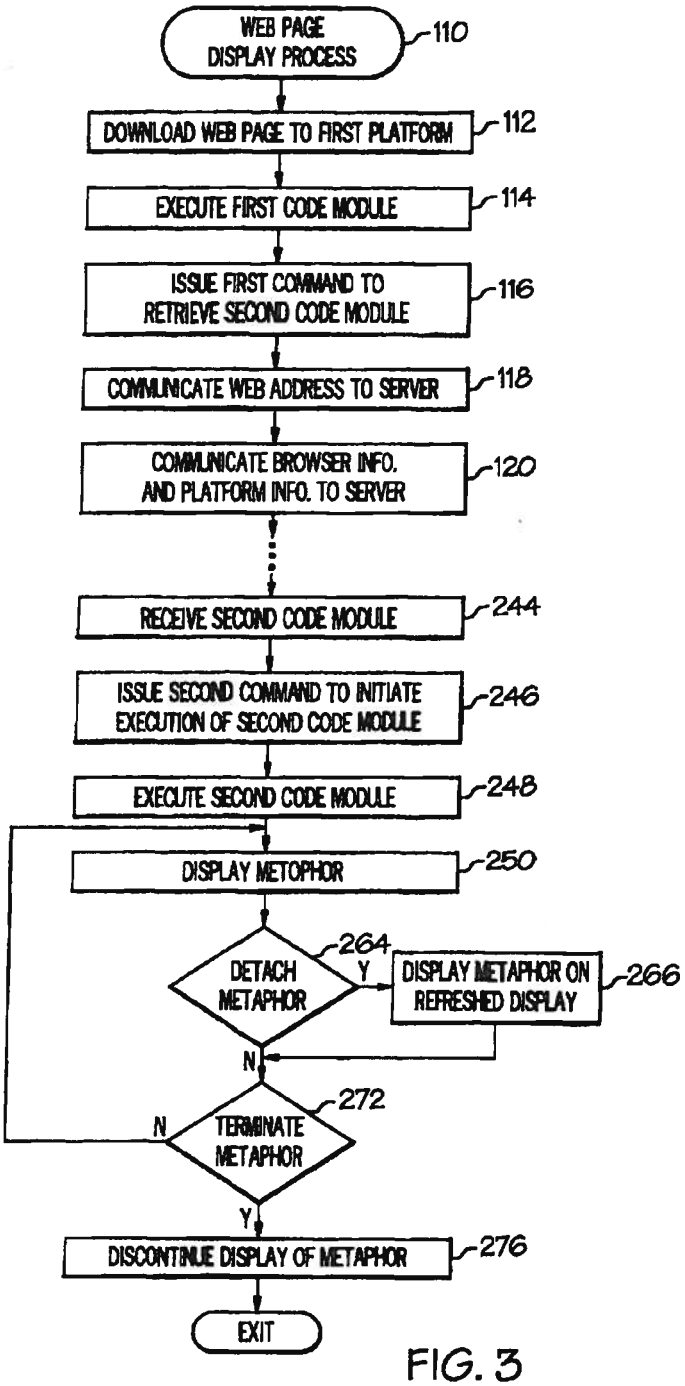

WEB PAGE DISPLAY PROCESS
110
DOWNLOAD WEB PAGE TO FIRST PLATFORM
112
EXECUTE FIRST CODE MODULE
114
ISSUE FIRST COMMAND TO RETRIEVE SECOND CODE MODULE
116
COMMUNICATE WEB ADDRESS TO SERVER
118
COMMUNICATE BROWSER INFO. AND PLATFORM INFO. TO SERVER
120
RECEIVE SECOND CODE MODULE
244
ISSUE SECOND COMMAND TO INITIATE EXECUTION OF SECOND CODE MODULE
246
EXECUTE SECOND CODE MODULE
248
DISPLAY METOPHOR
250
DETACH METAPHOR
264
Y
DISPLAY METAPHOR ON REFRESHED DISPLAY
266
N
TERMINATE METAPHOR
272
N
Y
DISCONTINUE DISPLAY OF METAPHOR
276
EXIT

FIG. 3

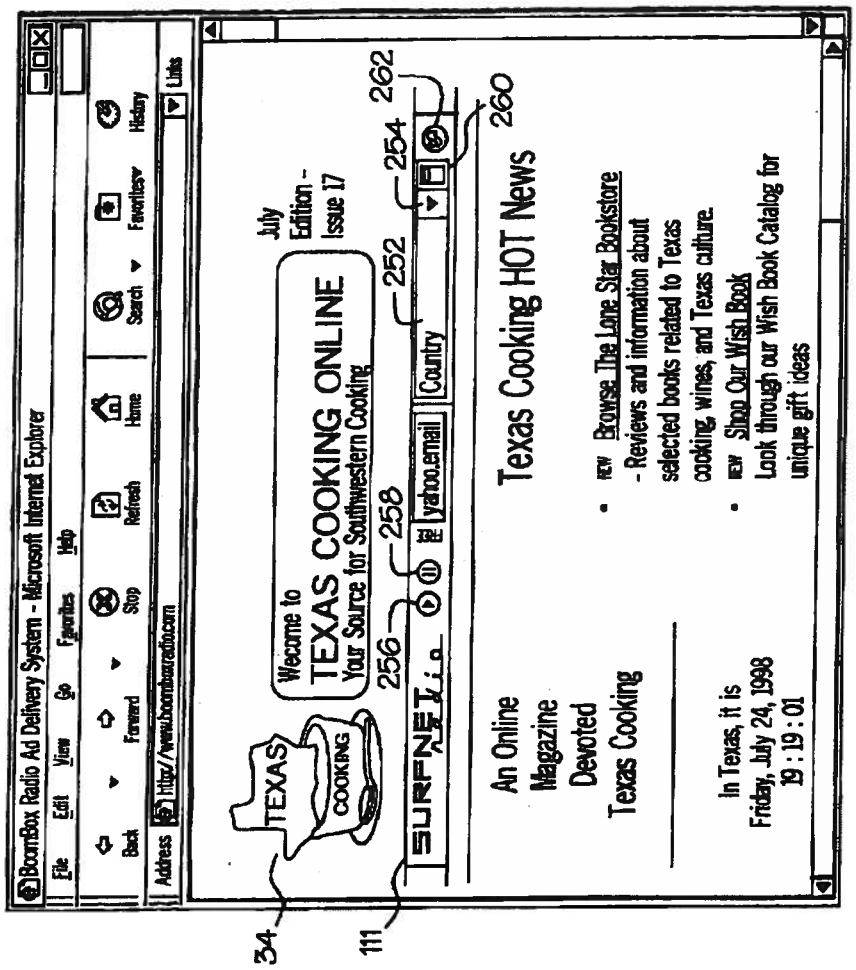

BoomBox Radio Ad Delivery System - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History
Address http://www.boomboxradio.com
Links
TEXAS COOKING
Welcome to
TEXAS COOKING ONLINE
Your Source for Southwestern Cooking
July Edition - Issue 17
SURFNET
yahoo.email
Country
An Online Magazine Devoted Texas Cooking
In Texas, it is Friday, July 24, 1998 19:19:01
Texas Cooking HOT News
NEW Browse The Lone Star Bookstore - Reviews and information about selected books related to Texas cooking, wines, and Texas culture.
NEW Shop Our Wish Book Look through our Wish Book Catalog for unique gift ideas
34
111
256
258
252
254
262
260

FIG. 4

42

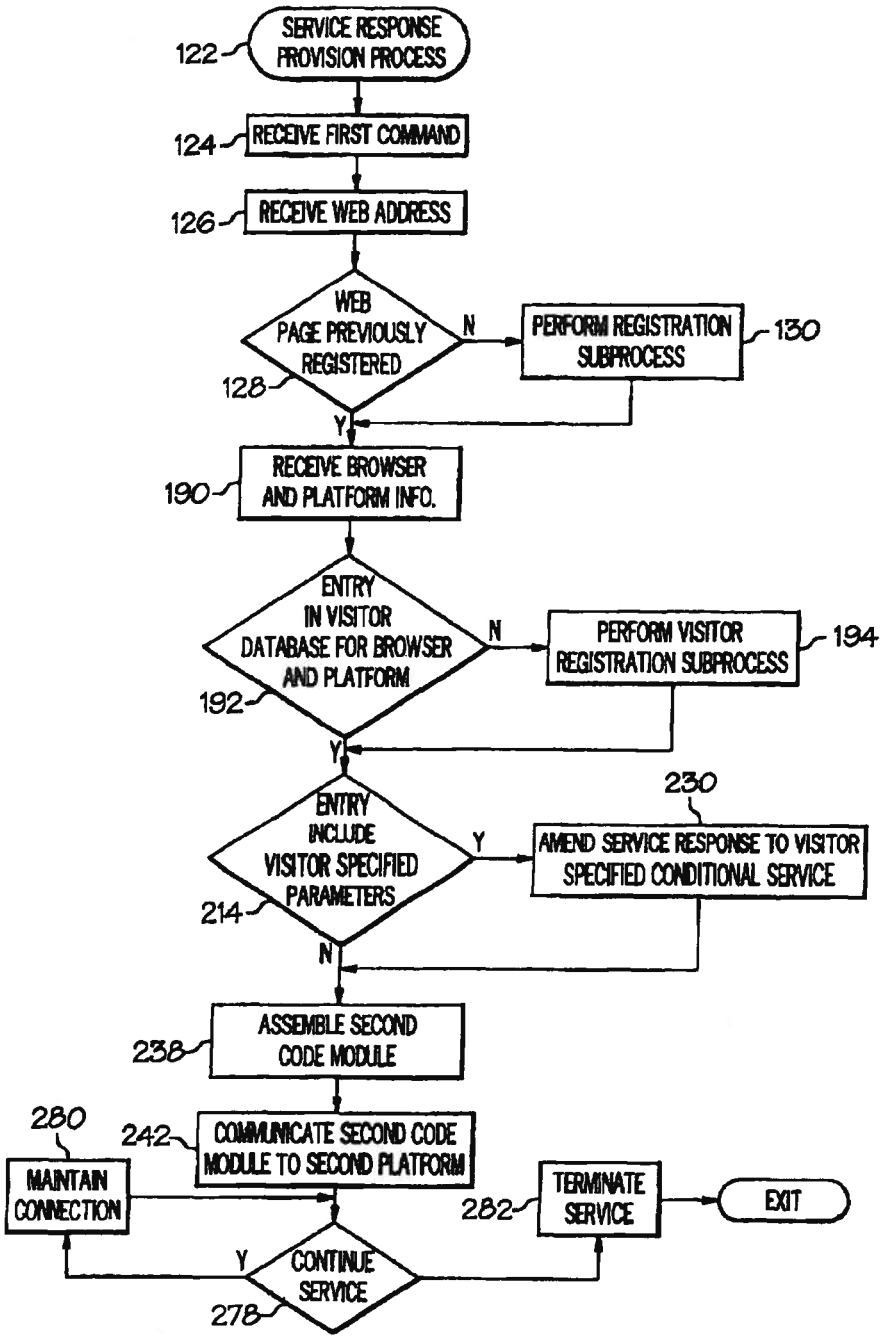

122
SERVICE RESPONSE PROVISION PROCESS
124
RECEIVE FIRST COMMAND
126
RECEIVE WEB ADDRESS
128
WEB PAGE PREVIOUSLY REGISTERED
N
PERFORM REGISTRATION SUBPROCESS
130
Y
190
RECEIVE BROWSER AND PLATFORM INFO.
192
ENTRY IN VISITOR DATABASE FOR BROWSER AND PLATFORM
N
PERFORM VISITOR REGISTRATION SUBPROCESS
194
Y
230
214
ENTRY INCLUDE VISITOR SPECIFIED PARAMETERS
Y
AMEND SERVICE RESPONSE TO VISITOR SPECIFIED CONDITIONAL SERVICE
N
238
ASSEMBLE SECOND CODE MODULE
280
242
COMMUNICATE SECOND CODE MODULE TO SECOND PLATFORM
MAINTAIN CONNECTION
282
TERMINATE SERVICE
EXIT
Y
278
CONTINUE SERVICE

FIG. 5

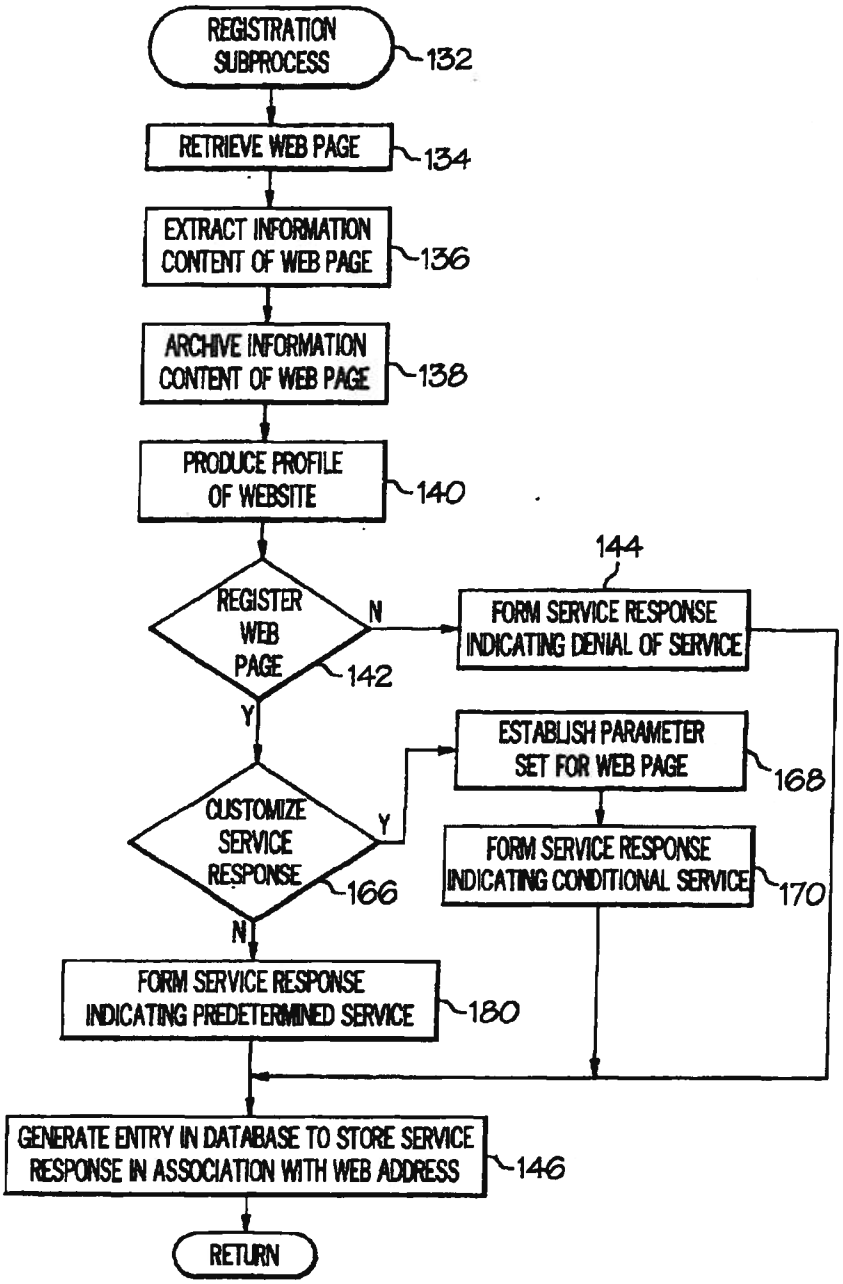

REGISTRATION SUBPROCESS
132
RETRIEVE WEB PAGE
134
EXTRACT INFORMATION CONTENT OF WEB PAGE
136
ARCHIVE INFORMATION CONTENT OF WEB PAGE
138
PRODUCE PROFILE OF WEBSITE
140
144
REGISTER WEB PAGE
142
N
FORM SERVICE RESPONSE INDICATING DENIAL OF SERVICE
Y
ESTABLISH PARAMETER SET FOR WEB PAGE
168
CUSTOMIZE SERVICE RESPONSE
166
Y
FORM SERVICE RESPONSE INDICATING CONDITIONAL SERVICE
170
N
FORM SERVICE RESPONSE INDICATING PREDETERMINED SERVICE
180
GENERATE ENTRY IN DATABASE TO STORE SERVICE RESPONSE IN ASSOCIATION WITH WEB ADDRESS
146
RETURN

FIG. 6

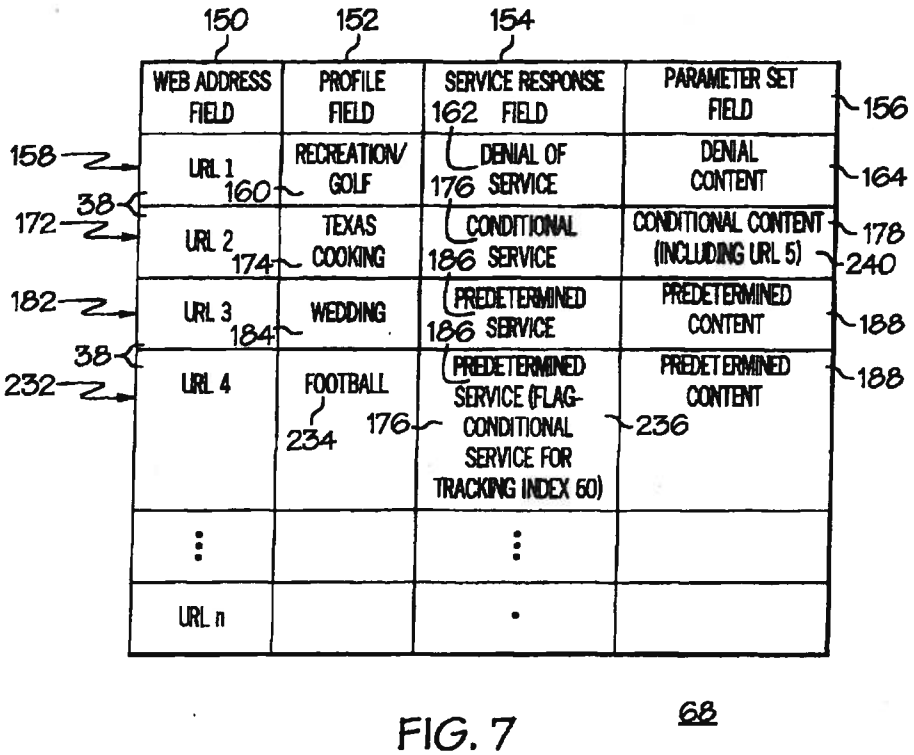

150
152
154
WEB ADDRESS FIELD
PROFILE FIELD
SERVICE RESPONSE FIELD
162
PARAMETER SET FIELD
156
158
URL 1
160
RECREATION/ GOLF
DENIAL OF SERVICE
176
DENIAL CONTENT
164
38
172
URL 2
174
TEXAS COOKING
CONDITIONAL SERVICE
186
CONDITIONAL CONTENT (INCLUDING URL 5)
178
240
182
URL 3
184
WEDDING
PREDETERMINED SERVICE
186
PREDETERMINED CONTENT
188
38
232
URL 4
FOOTBALL
234
176
PREDETERMINED SERVICE (FLAG-CONDITIONAL SERVICE FOR TRACKING INDEX 60)
236
PREDETERMINED CONTENT
188
URL n
68

FIG. 7

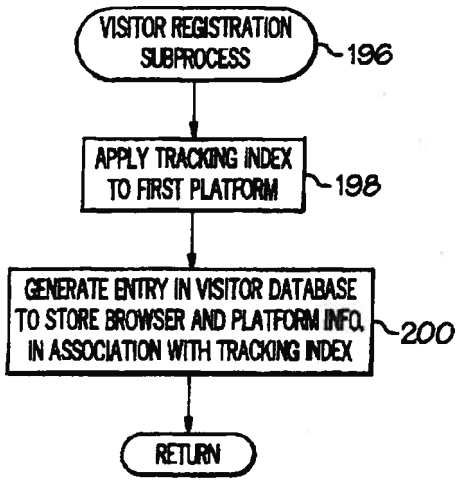

VISITOR REGISTRATION SUBPROCESS
196
APPLY TRACKING INDEX TO FIRST PLATFORM
198
GENERATE ENTRY IN VISITOR DATABASE TO STORE BROWSER AND PLATFORM INFO. IN ASSOCIATION WITH TRACKING INDEX
200
RETURN

FIG. 8

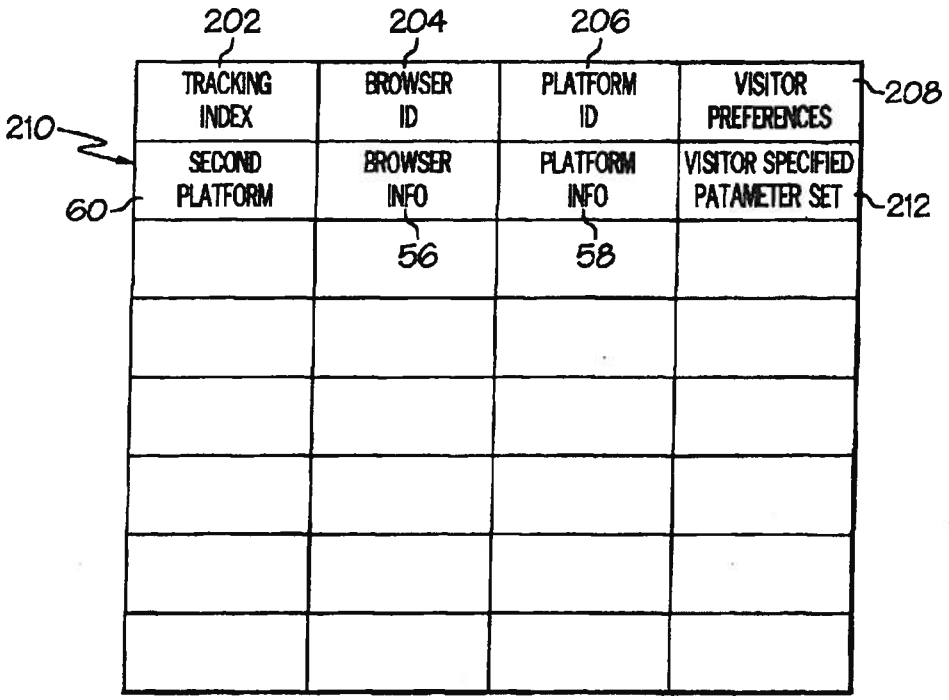

202
204
206
TRACKING INDEX
BROWSER ID
PLATFORM ID
VISITOR PREFERENCES
208
210
SECOND PLATFORM
BROWSER INFO
PLATFORM INFO
VISITOR SPECIFIED PATAMETER SET
212
60
56
58
70

FIG. 9

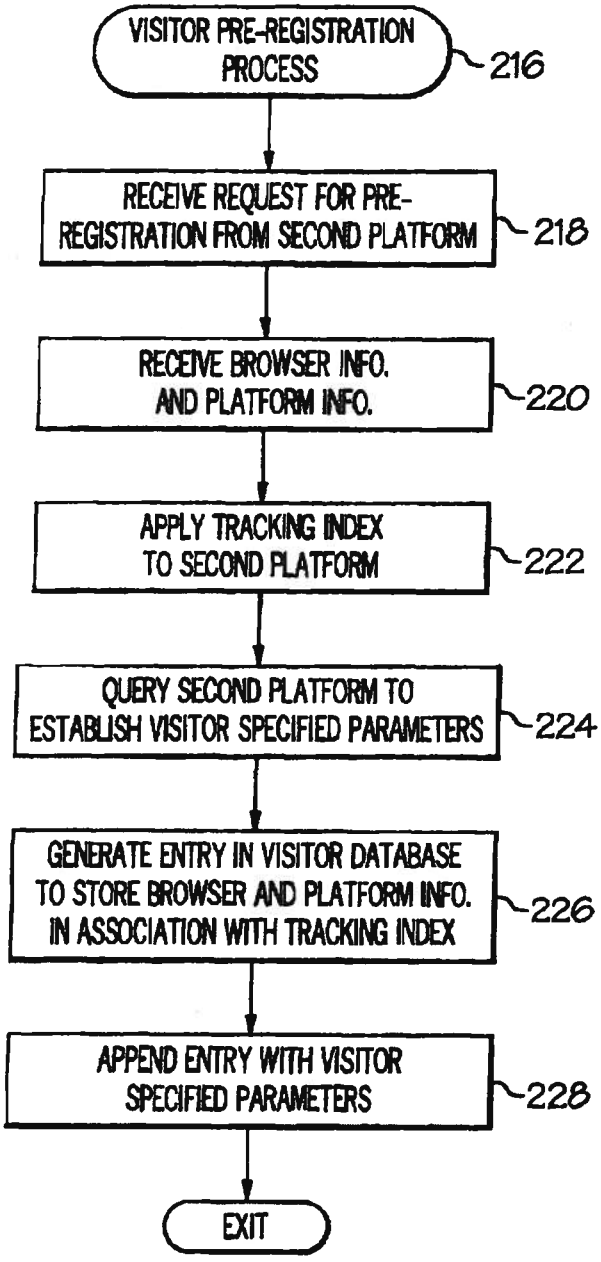

VISITOR PRE-REGISTRATION PROCESS
216
RECEIVE REQUEST FOR PRE-REGISTRATION FROM SECOND PLATFORM
218
RECEIVE BROWSER INFO. AND PLATFORM INFO.
220
APPLY TRACKING INDEX TO SECOND PLATFORM
222
QUERY SECOND PLATFORM TO ESTABLISH VISITOR SPECIFIED PARAMETERS
224
GENERATE ENTRY IN VISITOR DATABASE TO STORE BROWSER AND PLATFORM INFO. IN ASSOCIATION WITH TRACKING INDEX
226
APPEND ENTRY WITH VISITOR SPECIFIED PARAMETERS
228
EXIT

FIG. 10

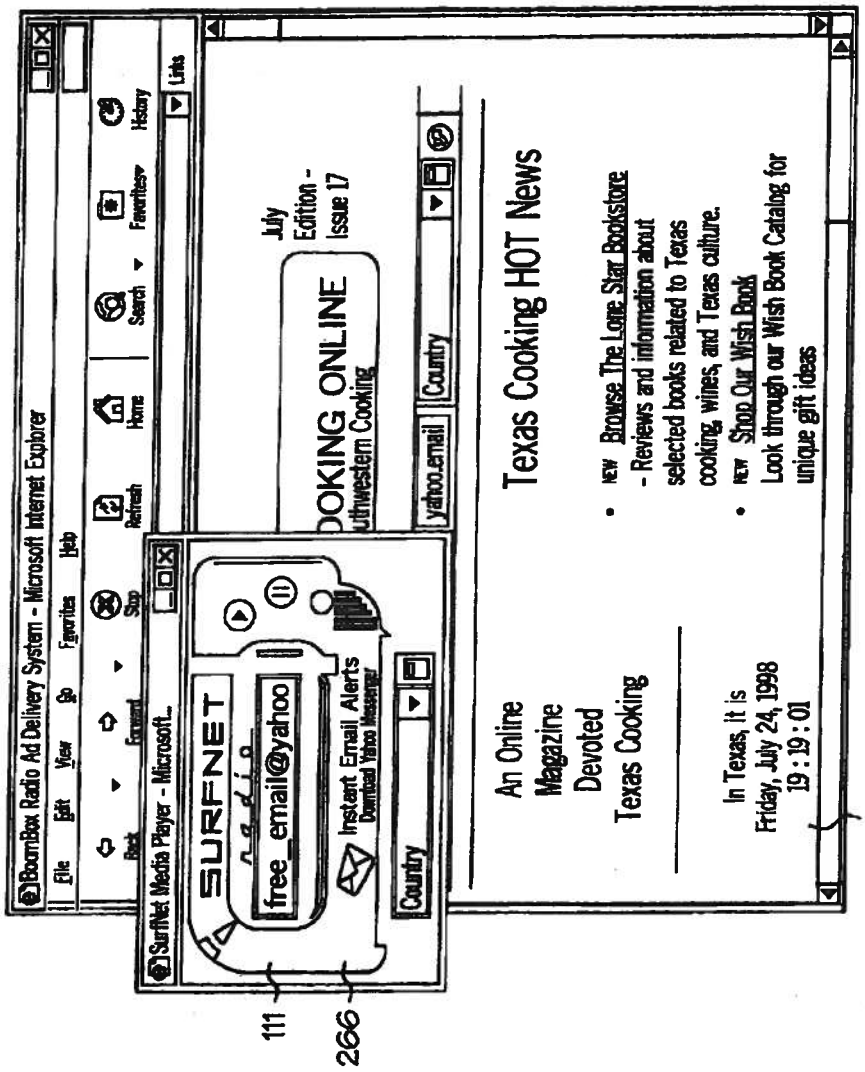

BoomBox Radio Ad Delivery System - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History
Links
SurfNet Media Player - Microsoft...
SURFNET
free_email@yahoo
Instant Email Alerts
Download Yahoo Messenger
Country
111
266
July
Edition -
Issue 17
OKING ONLINE
uthwestern Cooking
yahoo.email
Country
Texas Cooking HOT News
An Online
Magazine
Devoted
Texas Cooking
NEW Browse The Lone Star Bookstore
- Reviews and information about
selected books related to Texas
cooking, wines, and Texas culture.
NEW Shop Our Wish Book
Look through our Wish Book Catalog for
unique gift ideas
In Texas, it is
Friday, July 24, 1998
19 : 19 : 01
34
48

FIG. 11

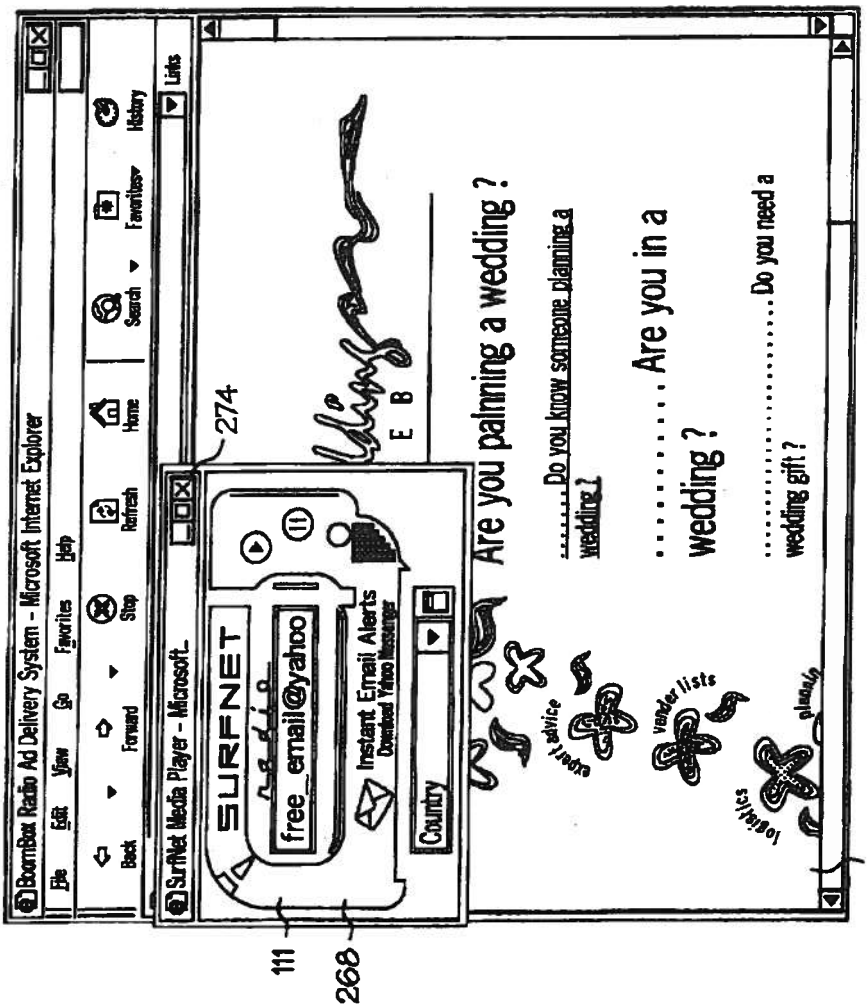

BoomBox Radio Ad Delivery System - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History
SurfNet Media Player - Microsoft...
Links
SURFNET
free_email@yahoo
Instant Email Alerts
Download Yahoo Messenger
Country
274
Are you palnning a wedding ?
.....Do you know someone planning a wedding ?
.....Are you in a wedding ?
.....Do you need a wedding gift ?
expert advice
vendor lists
local lists
planning
111
268
270

FIG. 12

METHOD AND SYSTEM FOR ADDING FUNCTION TO A WEB PAGE

TECHNICAL FIELD OF THE INVENTION

The present invention relates to the field of computer networks. More specifically, the present invention relates to methods and systems for adding function to Web pages that are accessible through the Internet.

BACKGROUND OF THE INVENTION

The worldwide network of computers commonly referred to as the "Internet" has seen explosive growth in the last several years. The Internet is expected to evolve with the adaptation of new forms of interactive technology applied to the basic Internet infrastructure which consists of many elements, not the least of which are the Web browser and Web page.

Groups of Web pages, forming Web sites, are evolving to a high level of sophistication at an staggering rate. Small to large corporations are taking advantage of this trend, and electronic commerce (E-Commerce), that is, business transactions taking place over the Internet is advancing at a rapid pace. It is highly desirable for those who would like to carry out commerce on the Internet to have a very sophisticated Web site that can perform numerous functions and services to an increasingly sophisticated class of Web site visitors. Such Web sites may desirably include such information services as searchable databases for price, stock, shipping, etc.; product information; competitive comparisons, and so forth.

In order for such information services to be successfully communicated to potential customers, it is imperative to garner the interest of large numbers of Internet users. As with more traditional forms of commerce, advertising plays an important role in attracting customers. Accordingly, what is needed is economical, yet effective, advertising and publicity in order to attract the interest of Internet users.

A recent advance in Web site technology is the addition of streaming media, as well as other more sophisticated functional enhancements, to Web sites. The concept of streaming media is defined broadly as audio and video being delivered to a Web site visitor in packets over the Internet. The streaming media can be delivered so quickly that audio sounds and/or graphic images can be heard and seen almost immediately, comparable in quality to commercial, over-the-air radio or television. Some examples of streaming media include banners, informational feeds using a "marquee", audio based commercials, and so forth.

Unfortunately, it is expensive to add such enhancements to Web sites. Bandwidth costs for delivering streaming media may be prohibitively expensive. In addition, there are problems associated with the complexity of producing the streaming media that is to be "broadcast" over the Web sites, and licensing of the streaming media if it is propriety.

A typical example of adding function to a Web site is the addition of an "affiliate" program. An affiliate program, provided by a third party may be desired by the Web site developer to add functionality to their Web site for the purpose of enhancing the appeal of the site or for revenue sharing in which they will receive a percentage of sales. In order to obtain such an affiliate program, the Web site developer may be required to register with the supplier of the affiliate program in order to obtain and execute the affiliate program in connection with his/her Web site. Unfortunately,

such a registration process typically requires the Web site developer to fill out lengthy on-line electronic forms. Such forms may be cumbersome and so frustrating, that filling out such forms leads to their abandonment on the part of the Web site developer. If the Web site developer successfully manages to register, the Web site developer must then wait for the implementing code for the affiliate program to be e-mailed to him/her. Once the Web site developer receives the implementing code, the code is then copied and pasted onto the HyperText Markup Language (HTML) for the Web site where desired.

Unfortunately, universal capability with the Web browsers that subsequently access the Web site with the enhanced function provided by the affiliate program is limited. That is, even though a Web site developer has successfully added the implementing code for the affiliate program, all Web browsers accessing the Web site may not be able to interpret the affiliate program and the Web site visitor may not be able to experience the added function.

SUMMARY OF THE INVENTION

Accordingly, it is an advantage of the present invention that a method and system for adding function to a Web page are provided.

It is another advantage of the present invention that a method and system are provided that are compatible with Web browsers which adhere to the standards for HyperText Transfer Protocol (HTTP).

It is another advantage of the present invention that a method and system are provided that add function to a Web page through an easily distributed software code module.

It is yet another advantage of the present invention that a method and system are provided that deliver services by client demand that are specific to predetermined parameters.

The above and other advantages of the present invention are carried out in one form by a method of operating a computer network to add function to a Web page. The method calls for downloading the Web page at a processor platform. When the Web page is downloaded, automatically executing a first code module embedded in the Web page. The first code module issues a first command to retrieve a second code module, via a network connection, from a server system, and the first code module issues a second command to initiate execution of the second code module at the processor platform.

The above and other advantages of the present invention are carried out in another form by a computer readable code module for adding function to a Web page. The code module is configured to be embedded in the Web page which is generated in a HyperText Markup Language (HTML), and is configured for automatic execution when the Web page is downloaded to a client machine supporting a graphical user interface and a Web browser. The computer readable code module includes means for communicating a Web address of the Web page to a server system via a network connection to initiate a download of a second computer readable code module to the client machine. The computer readable code module further includes means for communicating first information characterizing said Web browser to said server and means for communicating second information, characterizing said client machine to said server. In addition, the computer readable code module includes means for initiating execution of said second computer readable code module following the download of the second computer readable code module and means for providing a comment tag informing the Web browser to ignore the initiating means.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the present invention may be derived by referring to the detailed description and claims when considered in connection with the Figures, wherein like reference numbers refer to similar items throughout the Figures, and:

FIG. 1 shows a block diagram of a computer network in accordance with a preferred embodiment of the present invention;

FIG. 2 shows an exemplary computer readable code module in accordance with the preferred embodiment of the present invention,

FIG. 3 shows a flow chart of a Web page display process.

FIG. 4 shows an electronic display presenting a Web page including a media appliance metaphor;

FIG. 5 shows a flow chart of a service response provision process;

FIG. 6 shows a registration subprocess of the service response provision process;

FIG. 7 shows a Web address database generated by a server system of the computer network;

FIG. 8 shows a visitor registration subprocess of the service response provision process;

FIG. 9 shows a visitor database generated by the server system of the computer network;

FIG. 10 shows a visitor pre-registration process performed prior to the Web page display process of FIG. 3;

FIG. 11 shows the electronic display presenting the media appliance metaphor detached from the Web page; and

FIG. 12 shows the electronic display presenting another Web page including the media appliance metaphor.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows a block diagram of a computer network 20 in accordance with a preferred embodiment of the present invention. Computer network 20 includes a first processor platform 22, a second processor platform 24, and a server system 26. First processor platform 22, second processor platform 24, and server system 26 are connected together via a network 28. In a preferred embodiment, network 28 is the Internet. However, network 28 can also represent a LAN, a WAN, a wireless cellular network, or a combination of a wireline and wireless cellular network. It should be readily apparent to those skilled in the art that computer network 20 also includes many more processors and server systems which are not shown for the sake of clarity.

First processor platform 22 includes a central processing unit (CPU) 30 and a memory 32. Memory 32 includes a Web page 34 in which a first code module 36 is embedded. A Web address 38 in memory 32 is associated with Web page 34. In a preferred embodiment, Web page 34 is generated in HyperText Markup Language (HTML). HTML is the authoring software language used on the Internet's World Wide Web for creating Web pages.

Web address 38 is a Universal Resource Locator (URL), or a string expression used to locate Web page 34 via network 28. It should be readily apparent to those skilled in the art that first processor platform 22 also includes additional components such as input/output lines, a keyboard and/or mouse, and a display terminal which are not shown for the sake of clarity. In addition, memory 32 also contains additional information, such as application programs, operating systems, data, etc., which also are not shown for the sake of clarity.

Second processor platform 24 includes a CPU 40, a memory 42, input/output lines 44, an input device 46, such as a keyboard or mouse, a display device 48, such as a display terminal, and speakers 50. Memory 42 includes Web browser software 52 and a temporary memory 54. A first portion of memory 42 is designated for browser information (BROWSER INFO.) 56, and a second portion of memory 42 is designated for platform information (PLATFORM INFO.) 58. In addition, a third portion of memory 42 is designated for a tracking index 60, or cookie, which will be discussed in detail below. Those skilled in the art will understand that memory 42 also contains additional information, such as application programs, operating systems, data, etc., which are not shown in FIG. 1 for the sake of clarity.

Web browser 52 is software which navigates a web of interconnected documents on the World Wide Web via Internet 28. When a Web site, such as Web page 34, is accessed through Web address 38, Web browser 52 moves a copy of Web page 34 into temporary memory 58. Web browser 52 uses HyperText Transfer Protocol (HTTP) for communicating over Internet 28. In a preferred embodiment, Web browser 52 supports the HyperText Markup Language 1.0 and the Javascript 1.0 standards, such as Netscape 2.0 and above, Internet Explorer 3.0, and above, and the like.

Browser information 56 is information specific to Web browser 52. Browser information 56 includes, for example, make and version of Web browser 52, what plug-ins are currently present, and so forth. Platform information 58 is information specific to second processor platform 24. Platform information 58 includes, for example, make and version of platform 24, make and version of the operating system operating on platform 24, and so forth.

Server system 26 includes a processor (CPU) 62, a memory 64, a database structure 66 having a Web address database 68 and a visitor database 70, and a server structure 72 for accommodating streaming media servers 74 and other media servers 76. Ports 78 are in communication with server structure 72 and Internet 28 and are used by the Transmission Control Protocol/Internet Protocol (TCP/IP) transport protocol for providing communication across interconnected networks, between computers with diverse hardware architectures, and with various operating systems.

Memory 64 includes Web address database instructions 80, visitor database instructions 82, a common gateway interface program 84, code assembler instructions 86, and communication instructions 88. Web address database instructions 80 are executed by processor 62 for maintaining and accessing Web address database 68. Likewise, visitor database instructions 82 are executed by processor 62 for maintaining and accessing visitor database 70. CGI interface program 84 executes functions at server system 26 including among other things, checking if Web site 34 is registered. Code assembler instructions 86 are executed by processor 62 to assemble a second code module 90 which is subsequently communicated to second processor platform 24 through the execution of CGI interface program 84 and communication instructions 88. Second code module 90 is communicated from ports 78 over Internet 28 and downloaded to temporary memory 54 at second processor platform 24.

FIG. 2 shows an example format of first code module 36 in accordance with the preferred embodiment of the present invention. First code module 36 is generated in HTML and embedded in the HTML of Web page 34 (FIG. 1) when a Web page developer designs Web page 34. In a preferred embodiment, first code module 36 is generally distributable. That is, first code module 36 may be distributed via Internet

28, and copied and pasted into a Web page during Web page development. First code module 36 executes enough functionality to act as a "bootstrap loader" in order to load second code module 90 (FIG. 1) into temporary memory 54 (FIG. 1) of second processor platform 24 (FIG. 1) for subsequent execution.

A first command line (LINE NO. 1) 92 contains an exemplary initialization for a first command 93, i.e., a script, that will activate a Web address 94 for contacting server system 26 (FIG. 1) and calls CGI program 84 into execution. In addition, first command line 92 communicates Web address 38 to server system 26 via a network connection 96 (FIG. 1) over Internet 28. CGI program 84 executes multiple functions at server system 26. For example, CGI program 84 checks to see whether or not Web page 34 is registered. In addition CGI program 84 initiates the downloading of second code module 90 to second processor platform 24. A second command line (LINE NO. 2) 98 terminates the script started in first command line 92.

A third command line (LINE NO. 3) 100 starts a new script. Third command line 100 also contains a comment tag 102 used to allow Web browser 52 to ignore a fourth command line (LINE NO. 4) 104. Fourth command line 104 contains a second command 106 that initiates execution of second code module 90 that was downloaded to temporary memory 54 of second processor platform 24. A fifth command line 108 terminates comment tag 102 and terminates the script begun on third command line 100.

FIG. 3 shows a flow chart of a Web page display process 110. Web page display process 110 is performed by second processor platform 24 to add function, such as streaming media or other media services to Web page 34 when downloaded to second processor platform 24.

With reference to FIG. 4, FIG. 4 shows display device 48 (FIG. 1) presenting Web page 34 with added function, namely with the added function of a media appliance metaphor 111 in response to the activities carried out in connection with Web page display process 110.

Media appliance metaphor 111 is a software device that exists in the realm of electronic communication and has a counterpart in the real world. When displayed with Web page 34 on display device 48 of second processor platform 24, media appliance metaphor 111 is a graphic representation of something that looks and behaves like a media appliance. In the exemplary embodiment, media appliance metaphor 111 represents a radio image. Other examples of media appliance metaphors include television images, computer images, computer game toy images, and so forth. When applied to Web page 34, media appliance metaphor 111 gives the visitor to Web page 34 the impression that they already know how to use the device because it looks and acts like something that they are already familiar with.

Metaphors take any form desired for which practical programming constraints can be met. This includes, but is not limited to interactive video games, network games, network information appliances such as web based telephones or call centers, and notification service appliances, like beepers. First code module 36 (FIG. 1) used to apply the metaphor on a Web page is a universal program interface, and acts as a bootstrap loader capable of retrieving and executing programs suitable for such a purpose.

Although the present invention is described in connection with the presentation of media appliance metaphor 111 as applied to Web page 34, it need not be limited to such a media appliance metaphor. Rather, first code module 36 (FIG. 2) can be embedded in a Web page to be executed by a visiting processor platform in order to execute other code modules not associated with media appliance metaphors.

With reference back to FIG. 3, Web page display process 110 begins with a task 112. Task 112 causes Web browser 52 to download Web page 34 at second processor platform 24. In other words, Web browser 52 moves a copy of Web page 34, with the embedded first code module 36 into temporary memory 54 (FIG. 1) of second processor platform 24.

When Web page 34 is downloaded at second processor platform 24 in task 112, a task 114 is performed. Task 114 causes Web browser 52 to automatically execute first code module 36 embedded in Web page 34, a copy of which is now stored in temporary memory 54.

Following task 114, a task 116 is performed. At task 116, first code module 36 executes first command line 92 (FIG. 2) to retrieve second code module 90 by issuing first command 93 to activate Web address 94, contact server system 26 (FIG. 1), and call CGI program 84 into execution.

A task 118 is performed in connection with task 116. Task 118 causes second processor platform 24 to communicate Web address 38 to server system 26 through the execution of first command line 92, as discussed previously.

Next, a task 120 is performed. Like task 118, task 120 causes second processor platform 24 to communicate browser information 56 (FIG. 1) and platform information 58. (FIG. 1), through the execution of first command line 92, to server system 26. Following task 120, second processor platform 24 performs additional activities (not shown) pertinent to the downloading and presentation of Web page 34 on display device 48 (FIG. 1). Furthermore, as indicated by ellipses following task 120, and relevant to display process 110, second processor platform 24 awaits communication from server system 26 before display process 110 can proceed.

FIG. 5 shows a flow chart of a service response provision process 122 performed by server system 26 (FIG. 1) in response to display process 110 (FIG. 3). Process 122 begins with a task 124. Task 124 causes processor 62 (FIG. 1) of server system 26 to receive first command 93 (FIG. 3).

In response to receipt of first command 93 in task 124, a task 126 is performed. At task 126, server system 26 receives Web address 38 communicated by second processor platform 24 at task 118 (FIG. 3) of display process 110 (FIG. 3).

Following task 126, a query task 128 is performed. At query task 128, server system 26 determines if Web page 34 located by Web address 38 is previously registered. That is, processor 62 executes a portion of Web address database instructions 80 to access Web address database 68 in order to locate an entry in Web address database 68 corresponding to Web address 38.

When processor 62 determines that there is no entry in Web Address database 68 for Web address 38, process 122 proceeds to a task 130. Task 130 causes processor 62 of server system 26 to perform a registration subprocess.

FIG. 6 shows a registration subprocess 132 performed in response to task 130 of service response provision process 122 (FIG. 4). Registration subprocess 132 is performed by server system 26 to register Web page 34 with the controlling entity of server system 26. In addition, registration subprocess 132 is performed to determine a service response (discussed below) for Web page 34.

Registration subprocess 132 is performed automatically the first time that Web page 34 is downloaded at a processor platform. Desirably, registration subprocess 132 is invoked immediately following the design of Web page 34 by a Web

page developer. For example, following the design of Web page 34, the Web page developer may download Web page 34 at a processor platform to review the graphical, textual, and audio content of Web page 34 before Web page 34 becomes generally accessible by visitors.

When query task 128 determines that there is no entry in Web address database 68 for Web address 38 (FIG. 1), server system 26 may schedule a time to perform registration subprocess 132. Alternatively, registration subprocess 132 may be performed at task 130 (FIG. 4) immediately upon acknowledgment that there is no entry in Web address database 68 (FIG. 1).

Registration subprocess 132 begins with a task 134. Task 134 causes server system 26 (FIG. 1) to retrieve Web page 34. Task 134 may also causes server system 26 to retrieve Web pages (not shown) that are nested in association with Web page 34.

In response to task 134, a task 136 is performed. Task 136 causes processor 62 of server system 26 execute a portion of Web address database instructions 80 to extract information content of Web page 34. The information content of Web page 34 is derived from all characters and words that are written on Web page 34, and that are publicly accessible. The information content may then be reduced by extracting informational metatags, or HTML tags, embedded in Web page 34 that are used to specify information about Web page 34. In particular, the "keyword" and "description" metatags usually contain words and description information that accurately describe Web page 34. Other informational content which may be extracted are links, other URLs, domain names, domain name extensions (such as com, .edu., jp, .uk, etc.), and so forth.

Following task 136, a task 138 is performed. Task 138 causes processor 62 to archive the information content described in connection with task 136.

In response to extraction task 136 and archival task 138, a task 140 is performed. Task 140 causes processor 62 (FIG. 1) executing Web address database instructions 80 to produce a particular "signature" or profile of Web page 34. This profile is important for determining the nature of the interest by a visitor using second processor platform 24 to display Web page 34 from whence the profile is produced in order to perform a service response (discussed below) related to the profile.

Following task 140, a query task 142 is performed. Query task 142 determines whether or not Web page 34 can be registered. Processor 62 (FIG. 1) may determine that Web page 34 cannot be registered if the information content of Web page 34 is objectionable or otherwise unacceptable to be displayed with added function, i.e., media appliance metaphor 111 (FIG. 4). When query task 142 determines that Web page 34 is not to be registered, subprocess 132 proceeds to a task 144.

Task 144 causes processor 62 (FIG. 2) to form a service response indicating a denial of service. In a preferred embodiment, a desired service response is media appliance metaphor 111 functioning to provide streaming media, in this case music, along with Web page 34. However, with respect to task 144, the service response indicating denial of service may be the media appliance metaphor 111 having a slash through it. Alternatively, the service response may simply be an absence of any media appliance metaphor. Following task 144, subprocess 132 proceeds to a task 146.

Referring to FIG. 7 in connection with task 146, FIG. 7 shows Web address database 68 of server system 26 (FIG. 1). Web address database 68 includes as a minimum, a Web address field 150, a Web page profile field 152, a service response field 154, and a parameter set field 156. Task 146 (FIG. 6) causes processor 62 (FIG. 1) to generate an entry, for example, a first exemplary entry 158, in Web address database 68. Web address field 150 is designated for a Web address, or URL. Profile field 152 contains the profile of the Web address produced in task 140 (FIG. 6) of registration subprocess 132. Service response field 154 is designated for a service response, and parameter set field 156 is designated for parameters used to assemble second code module 90 having the desired service response.

First entry 158 generated in response to task 144 (FIG. 6) includes Web address 38 identified simply as URL 1 in Web address field 150, a profile 160 in profile field 152 associated with URL 1 indicates Web page 34 as being directed toward RECREATION/GOLF. A service response 162 related to profile 160 indicating a denial of service is stored in service response field 154 for entry 158, and a denial content parameter set 164 associated with service response 162 are used to form an audible, visual, or other presentation of denial service response 162.

Referring back to query task 142 (FIG. 6) of registration subprocess 132, when query task 142 determines that Web page 34 is registered, subprocess 132 proceeds to a query task 166. At query task 166, processor 62 (FIG. 1) may execute a portion of Web address database instructions 80 to determine if a service response for Web page 34 is to be customized. That is, the Web page developer of Web page 34 has the option of customizing media appliance metaphor 111 (FIG. 4). Such customization may include, but is not limited to music formats tailored to fit the profile, or personality, of Web page 34, the appearance of metaphor 111, the names and formats of the radio channels, the banners that are displayed, the specific type of informational feeds, and so forth.

When processor 62 determines that the service response is to be customized, subprocess 132 proceeds to a task 168. At task 168, processor 62 (FIG. 1) establishes a parameter set for customization of media appliance metaphor 111 to be applied to Web page 34. The custom metaphor is defined by the parameter set. Establishment of the parameter set may be performed through a query exercise performed between server system 26 and the Web page developer of Web page 34. Customization can include references to commercials targeted to Web page 34, custom configuration data, custom Web page metaphor preferences, Web page owner preferences, and so forth.

In response to task 168, a task 170 is performed. Task 170 causes processor 62 to form a service response indicating conditional service, i.e., presentation of media appliance metaphor 111 that has been customized as a result of the activities associated with task 168. Following task 170, registration subprocess 132 proceeds to task 146 for generation of an entry in Web address database 68 (FIG. 7) to store the service response in association with the Web address.

Referring momentarily to FIG. 7, Web address database 68 includes a second exemplary entry 172. Second entry 172 generated in response to task 170 (FIG. 6) includes a Web address 38 in Web address field 150 identified simply as URL 2. A profile 174 in profile field 152 associated with URL 2 indicates Web page 34 as being directed toward TEXAS COOKING. A service response 176 related to profile 174 indicating conditional service is stored in service response field 154 for entry 172, and a conditional content parameter set 178 associated with conditional service